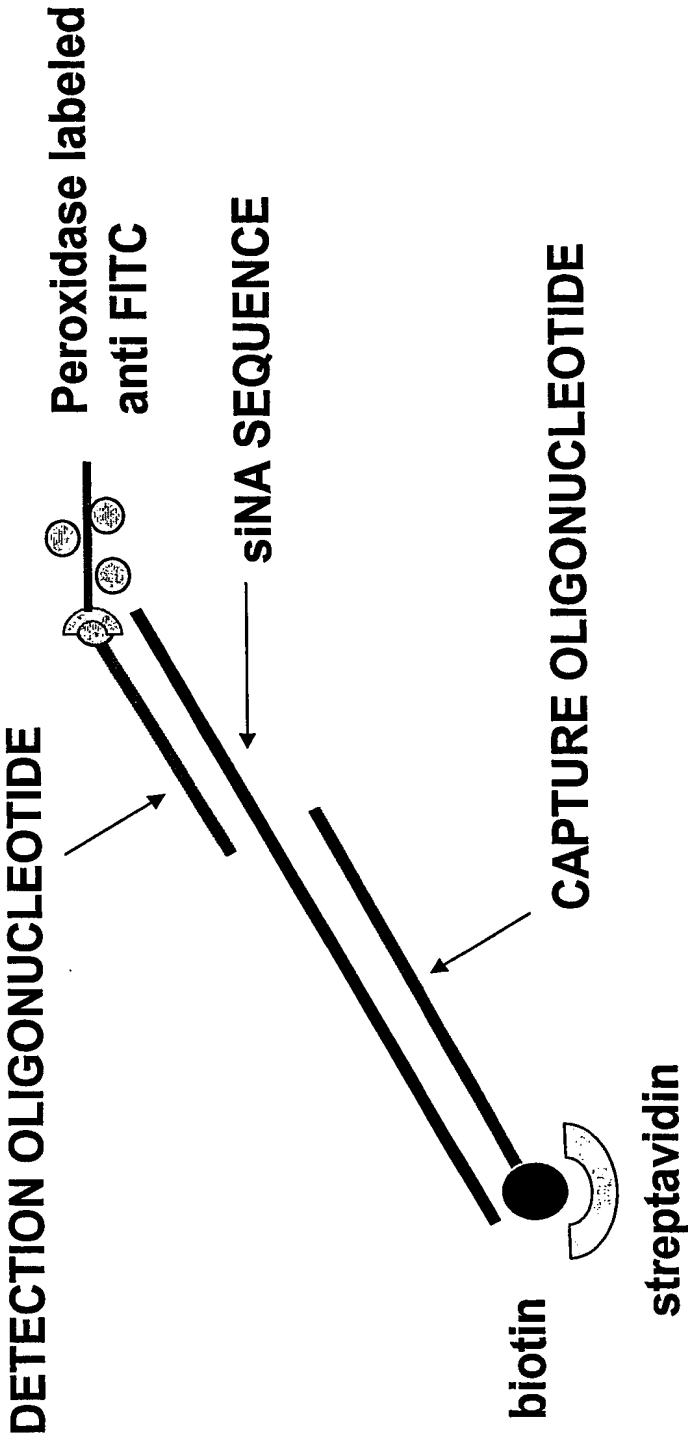
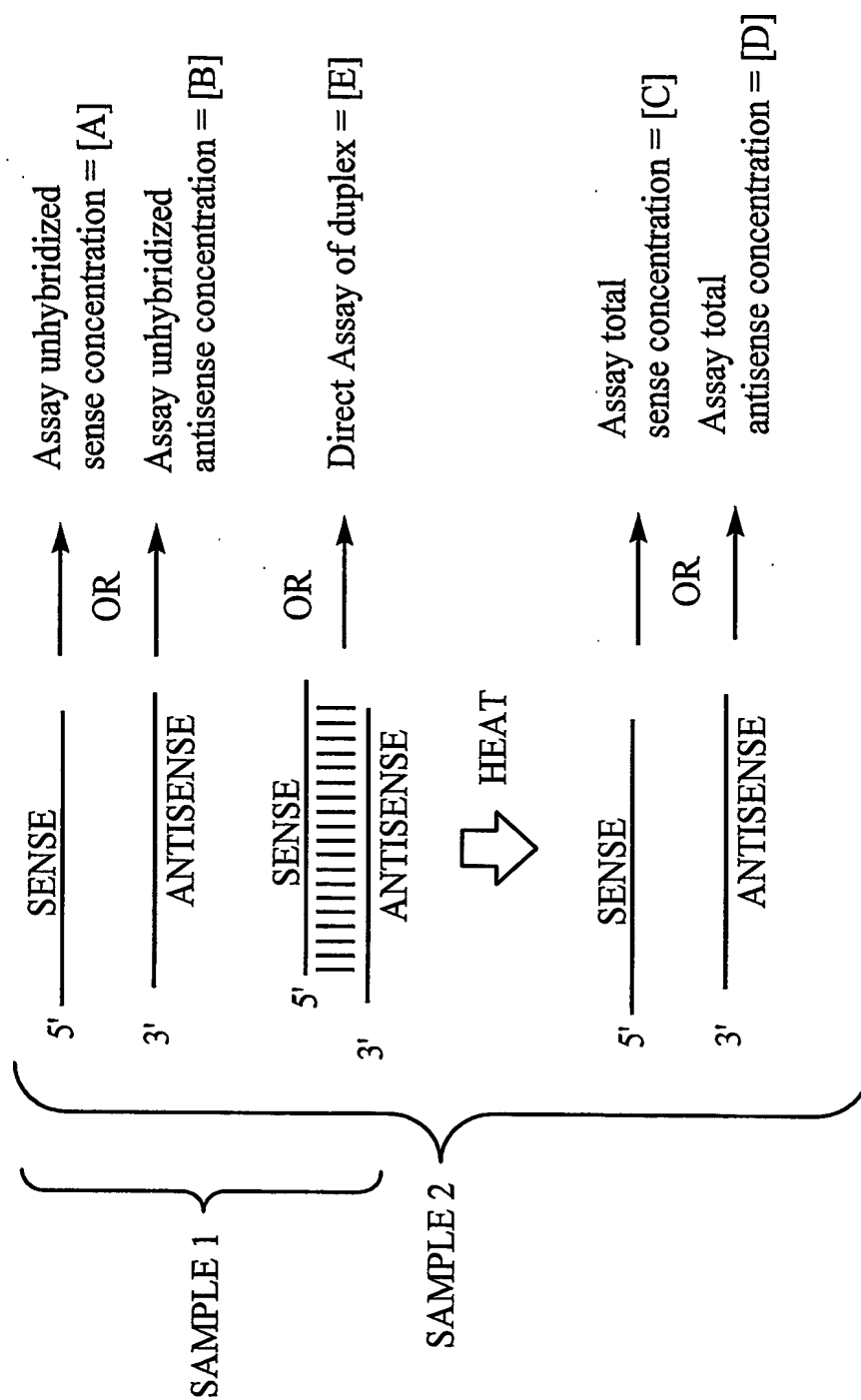


**Figure 1B: siNA Hybridization Assay**



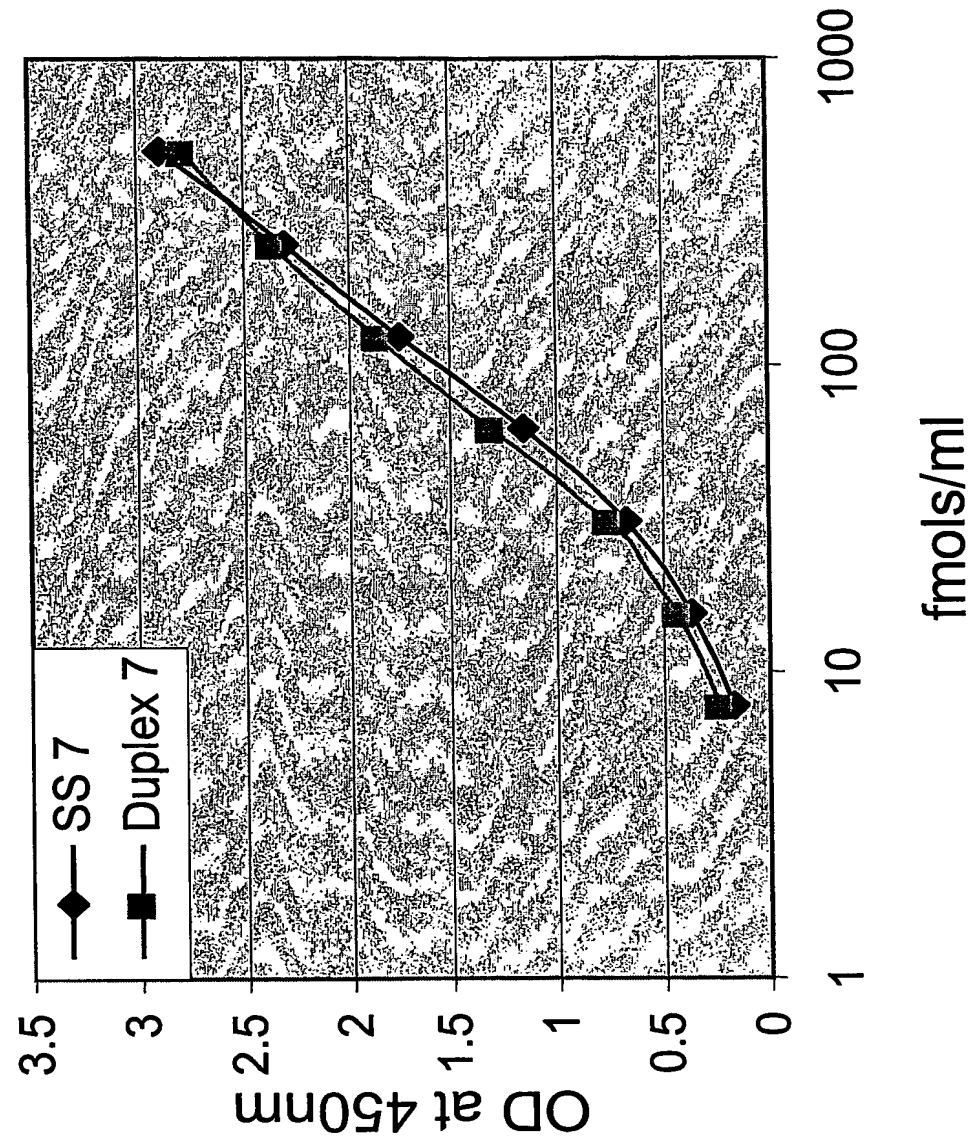
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**Figure 1C: Principle of *siNA* detection/quantitation Assays**

[C] - [A] = [Duplex] based upon analysis of sense strand  
 [D] - [B] = [Duplex] based upon analysis of antisense strand  
 [E] = [Duplex] based upon direct analysis of duplex

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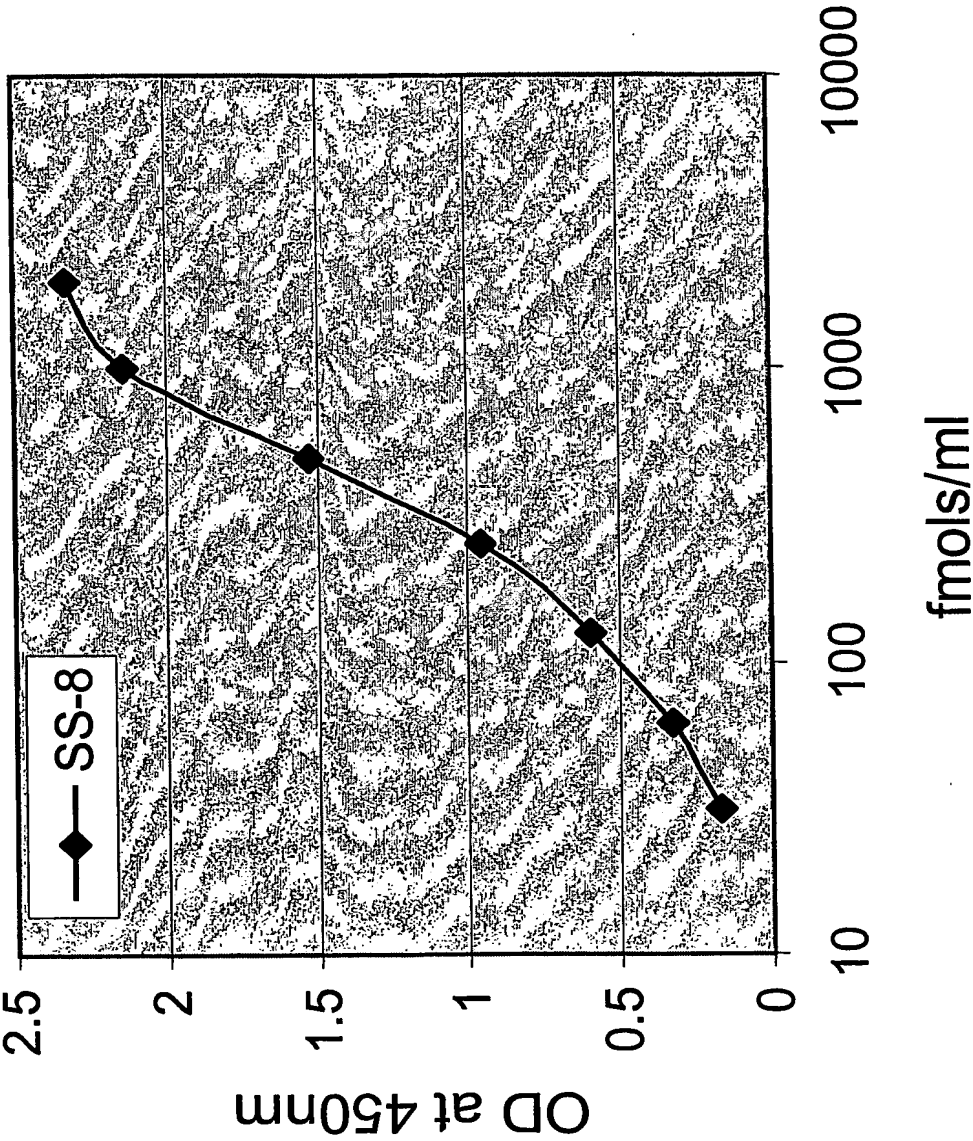
**Figure 2A: siNA Stab 7 Sense Strand Standard Curve**



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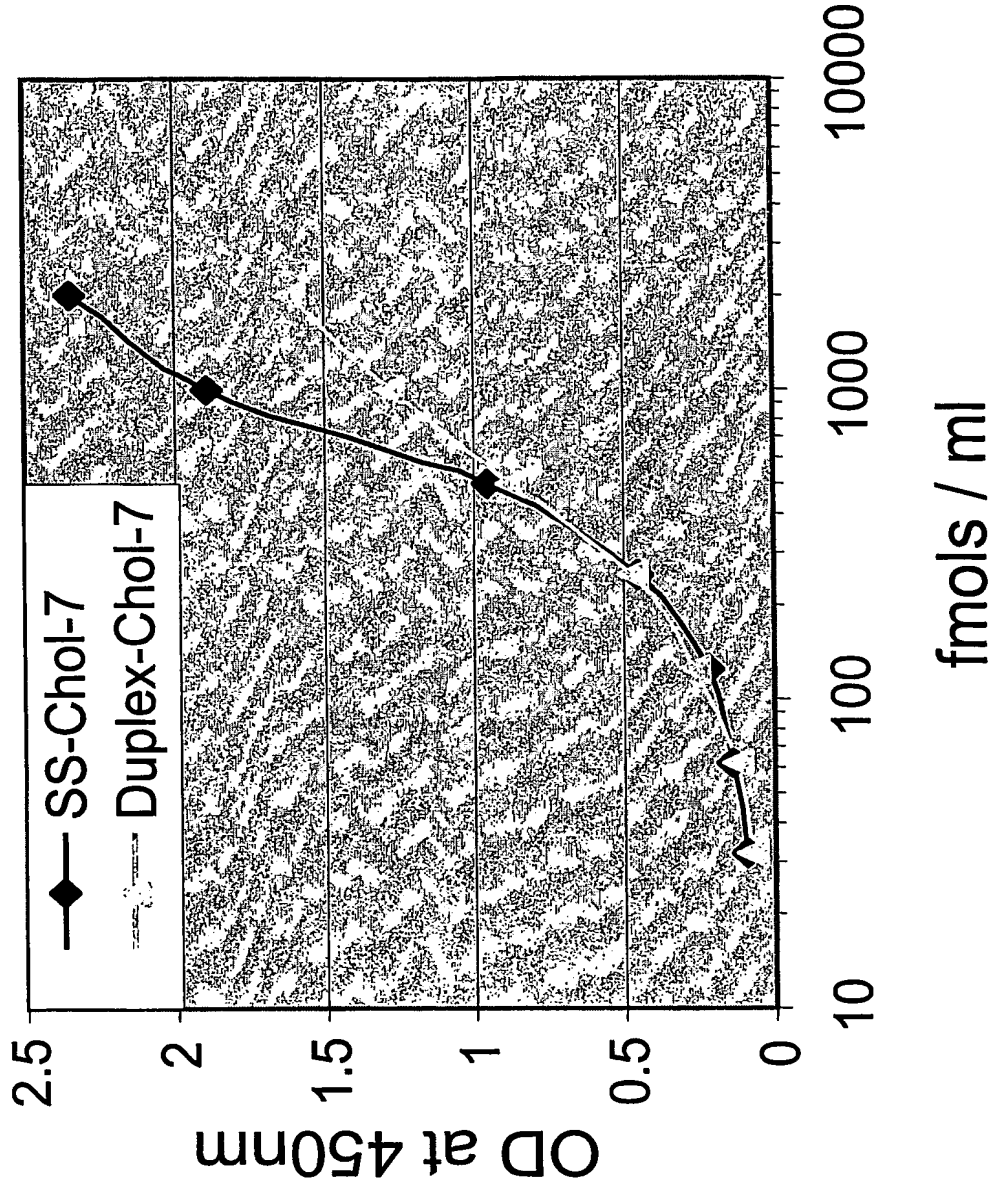
**Figure 2B: siNA Stab 8 Antisense Strand Standard Curve**



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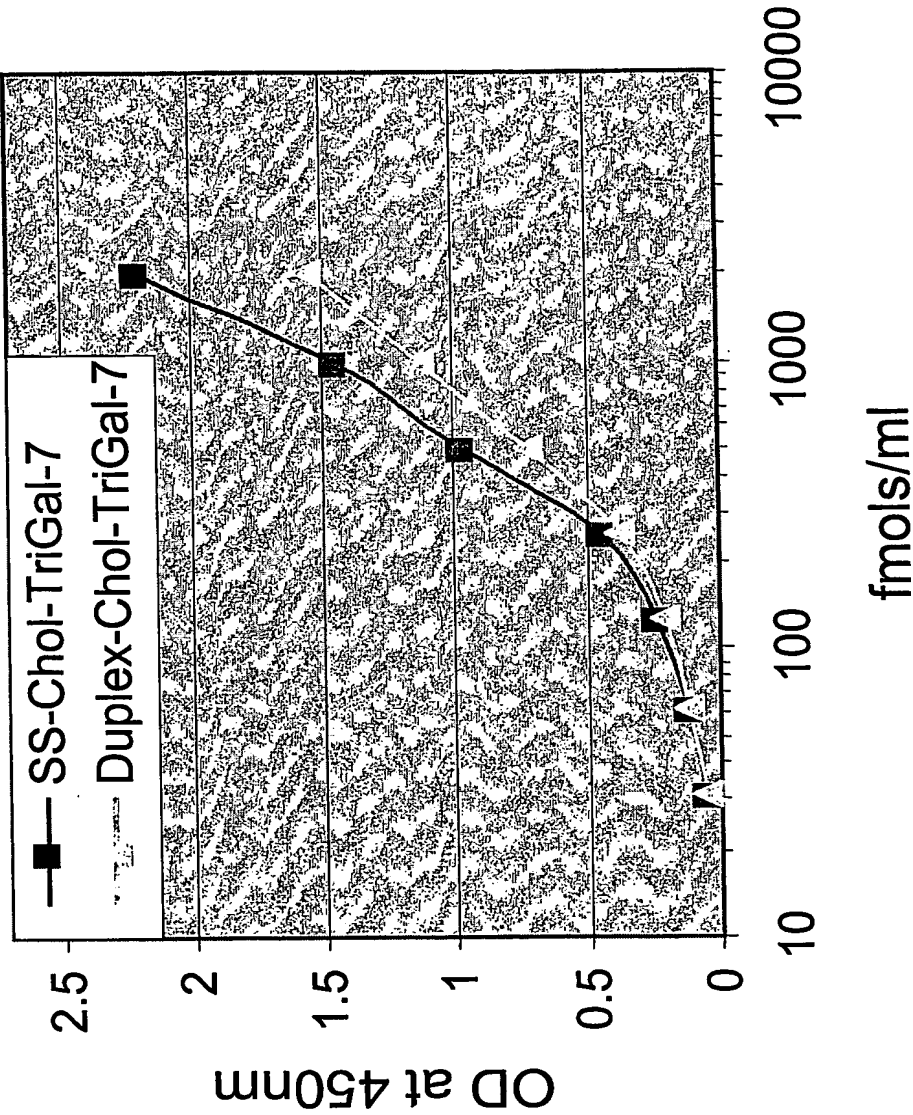
**Figure 2C: siNA Stab 7 Cholesterol Conjugate  
Sense Strand Standard Curve**



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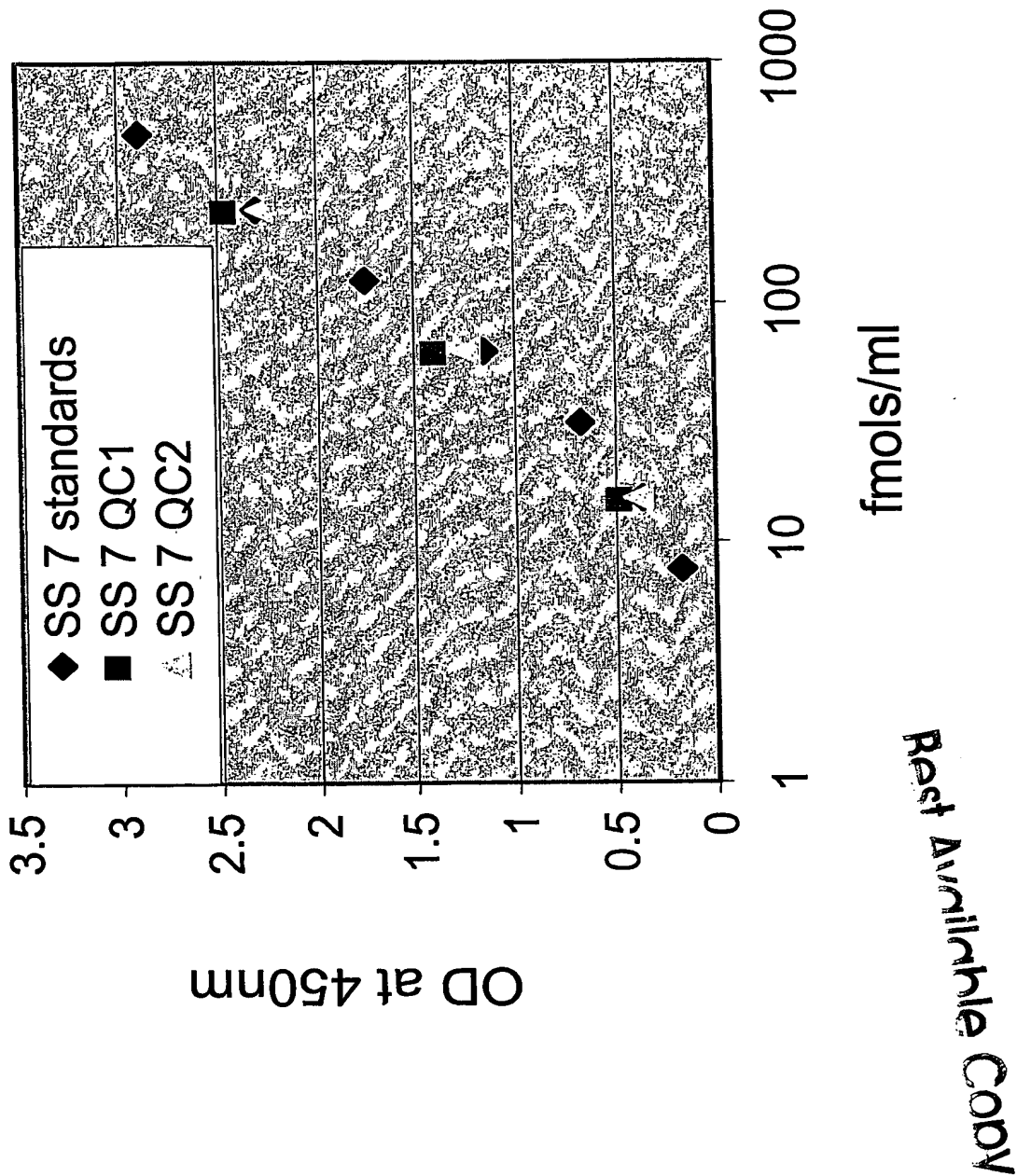
**Figure 2D: siNA Stab 7 Trigalactose Cholesterol  
Conjugate Antisense Strand Standard Curve**



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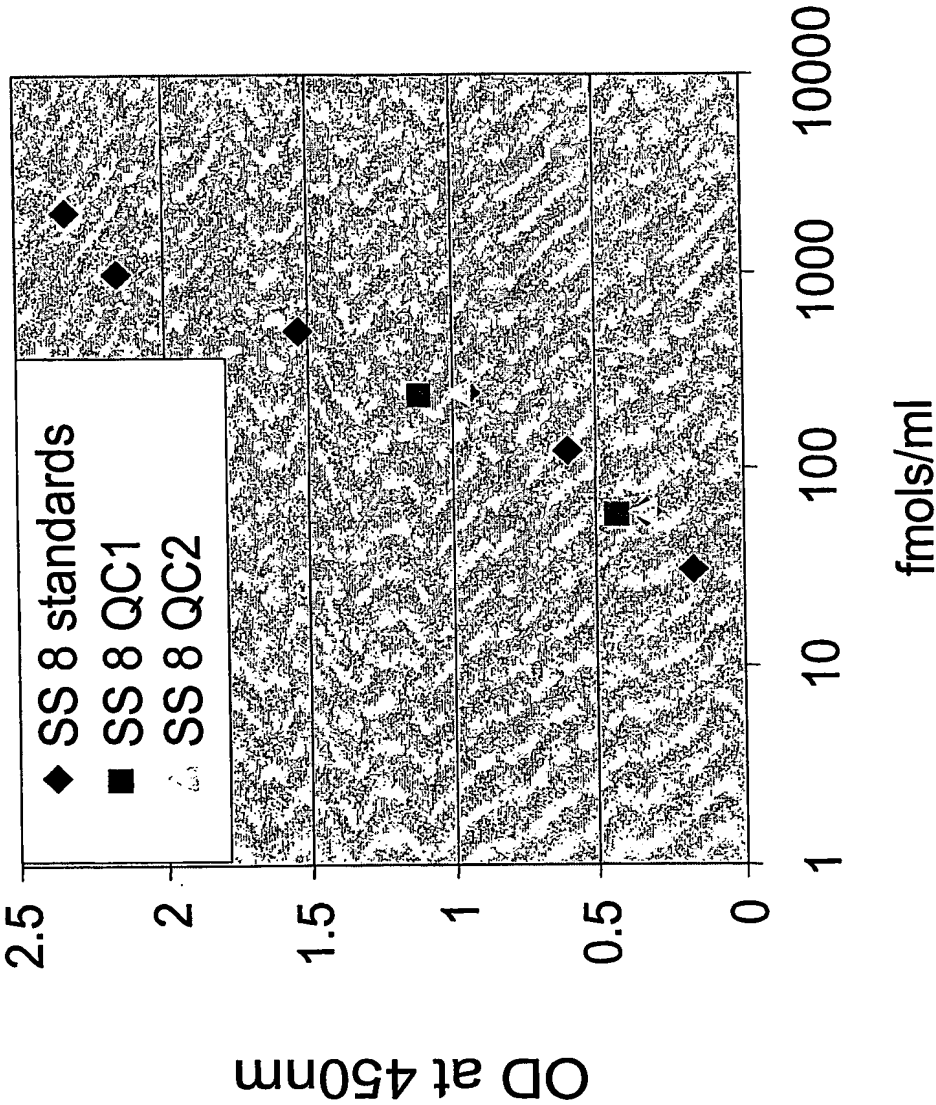
**Figure 3A: siNA Stab 7 Single Stranded  
Quality Control Sample**





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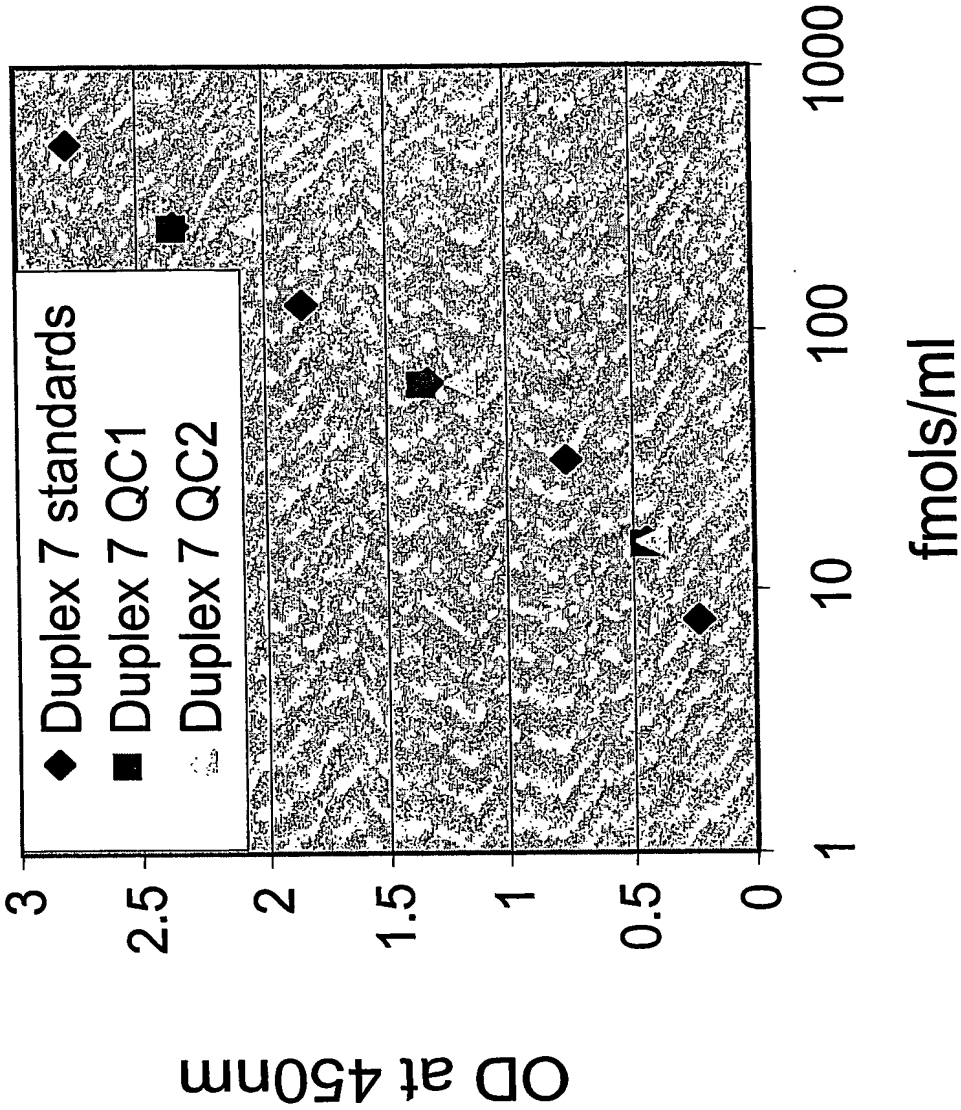
**Figure 3B: siNA Stab 8 Single Stranded  
Quality Control Sample**



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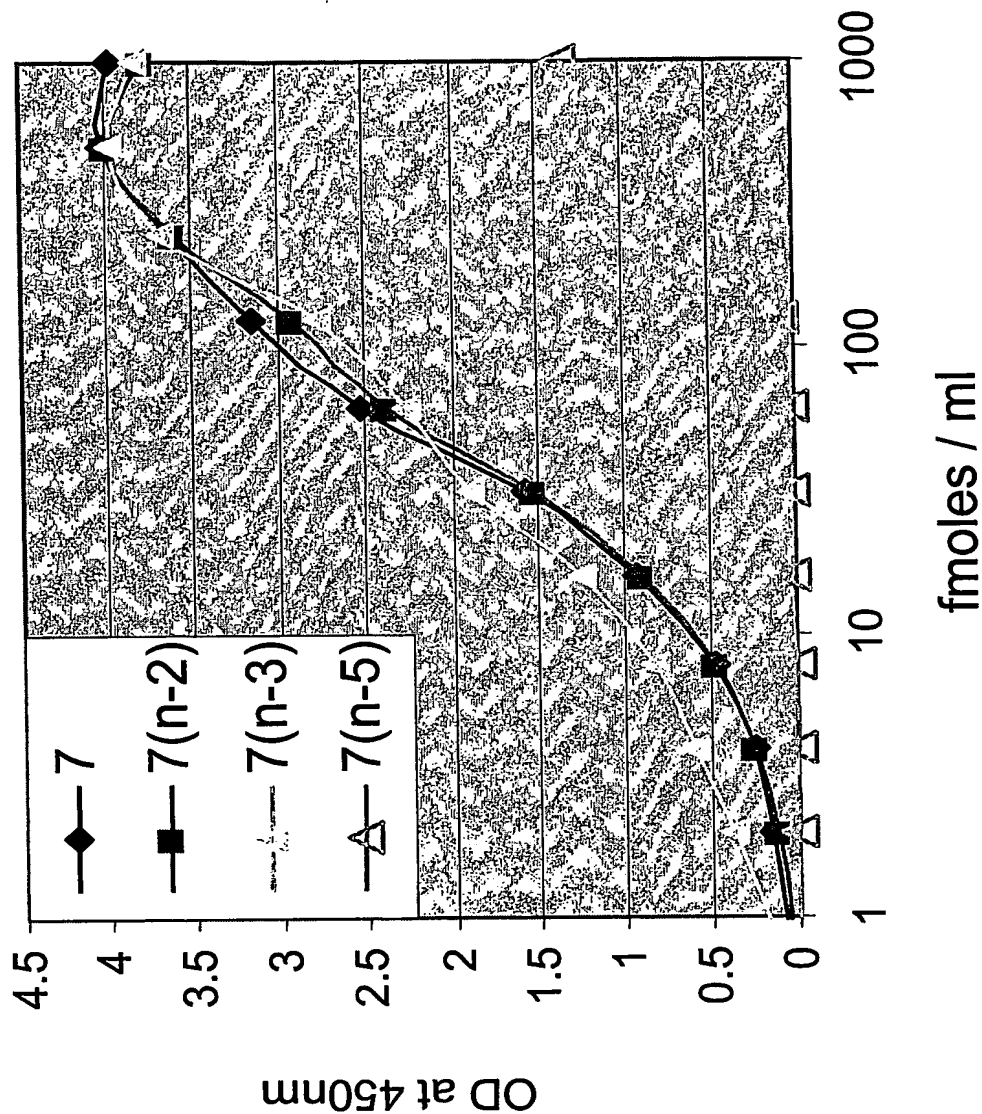
**Figure 3C: siNA Stab 7 Duplex  
Quality Control Sample**



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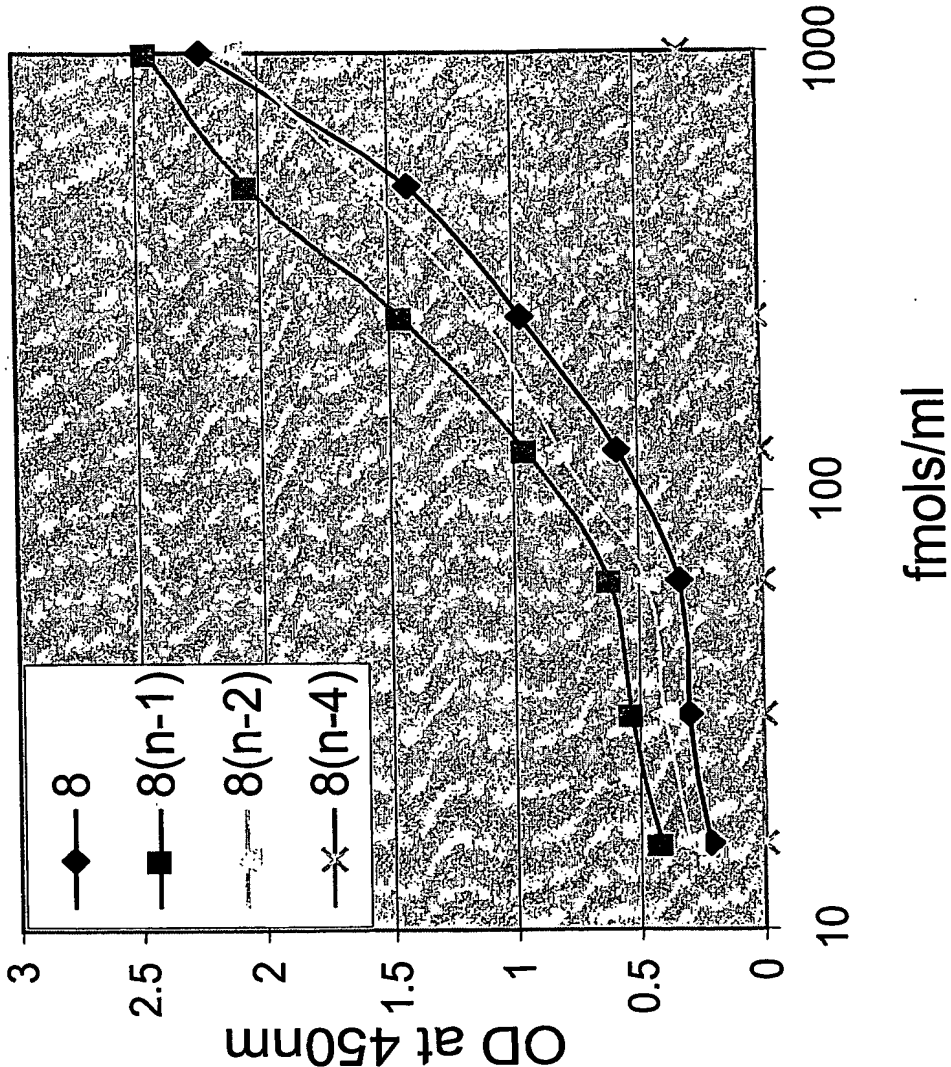
**Figure 4A: Detection of potential  
siNA Stab 7 Metabolites via Hybridization Assay**



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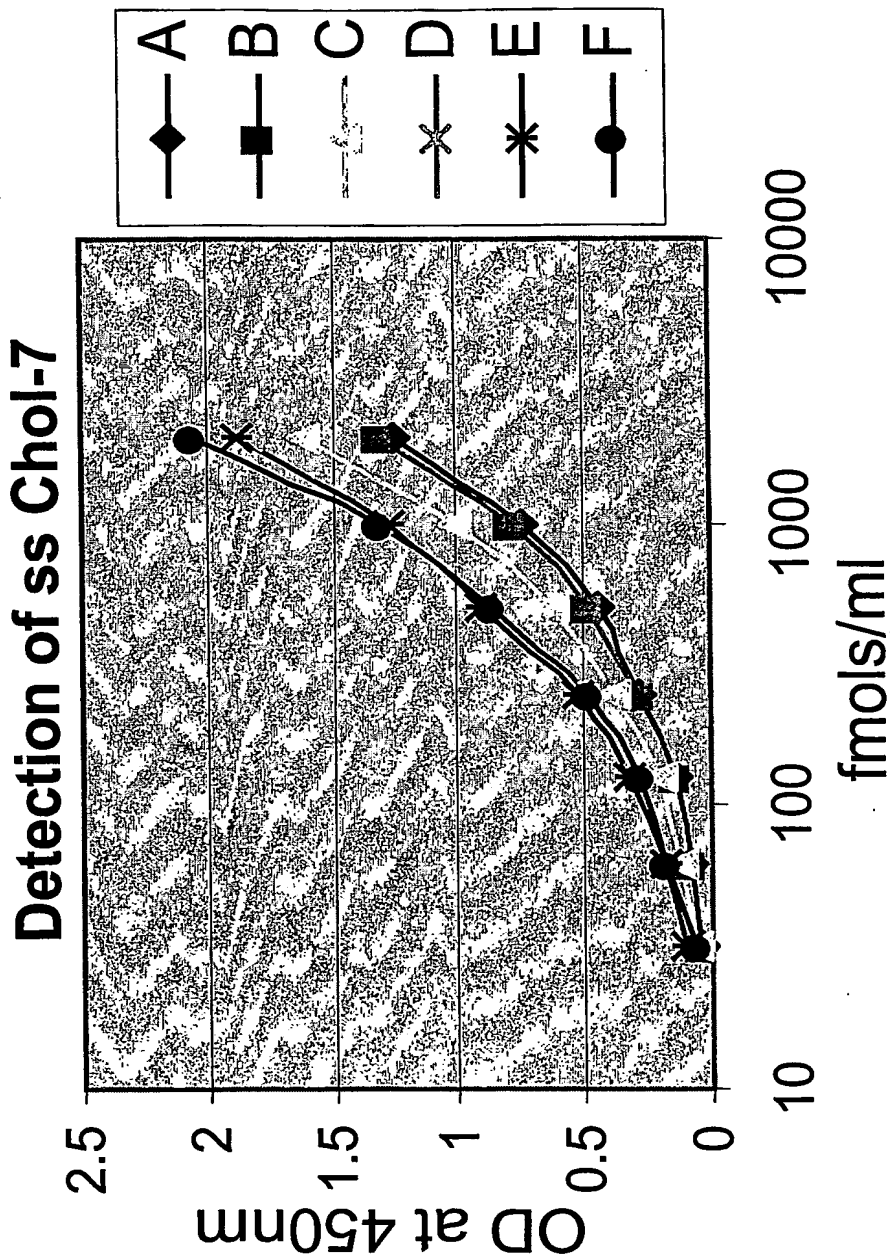
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**Figure 4B: Detection of potential  
siNA Stab 8 Metabolites via Hybridization Assay**



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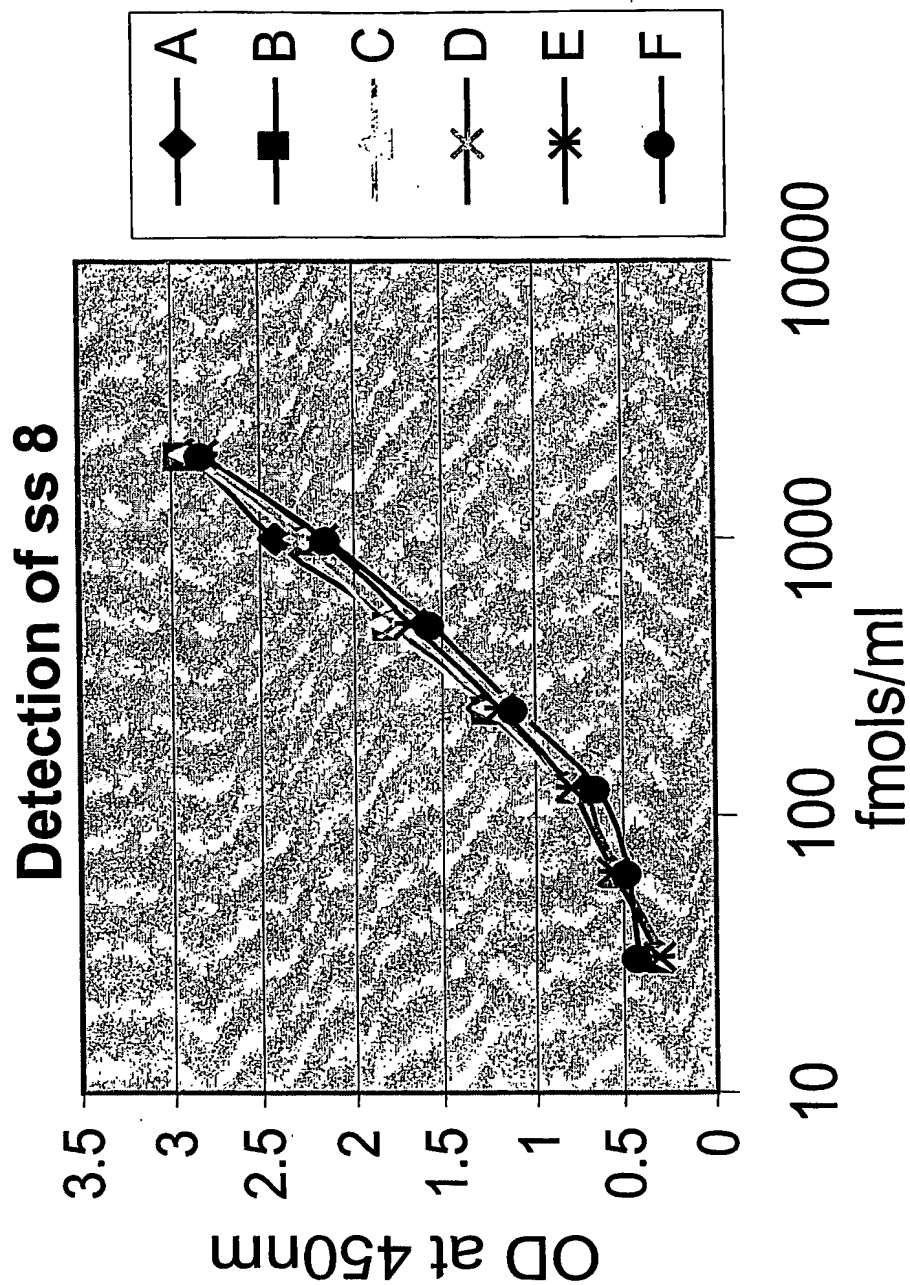
**Figure 5A: Effect of Hepatocyte lysate on detection of single stranded Stab 7 cholesterol conjugate siNA sequence**



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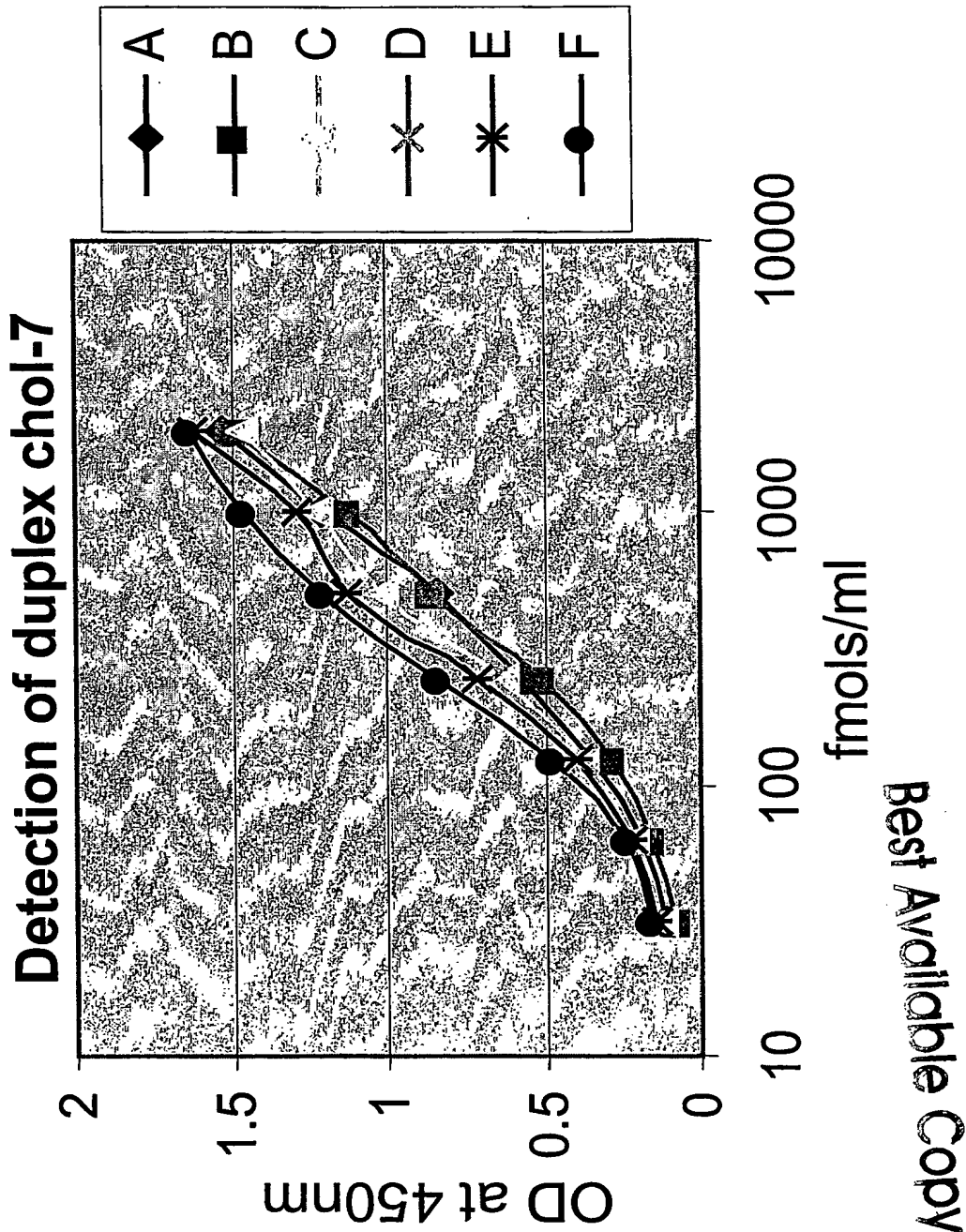
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**Figure 5B: Effect of Hepatocyte lysate on detection of single stranded Stab 8 siNA sequence**

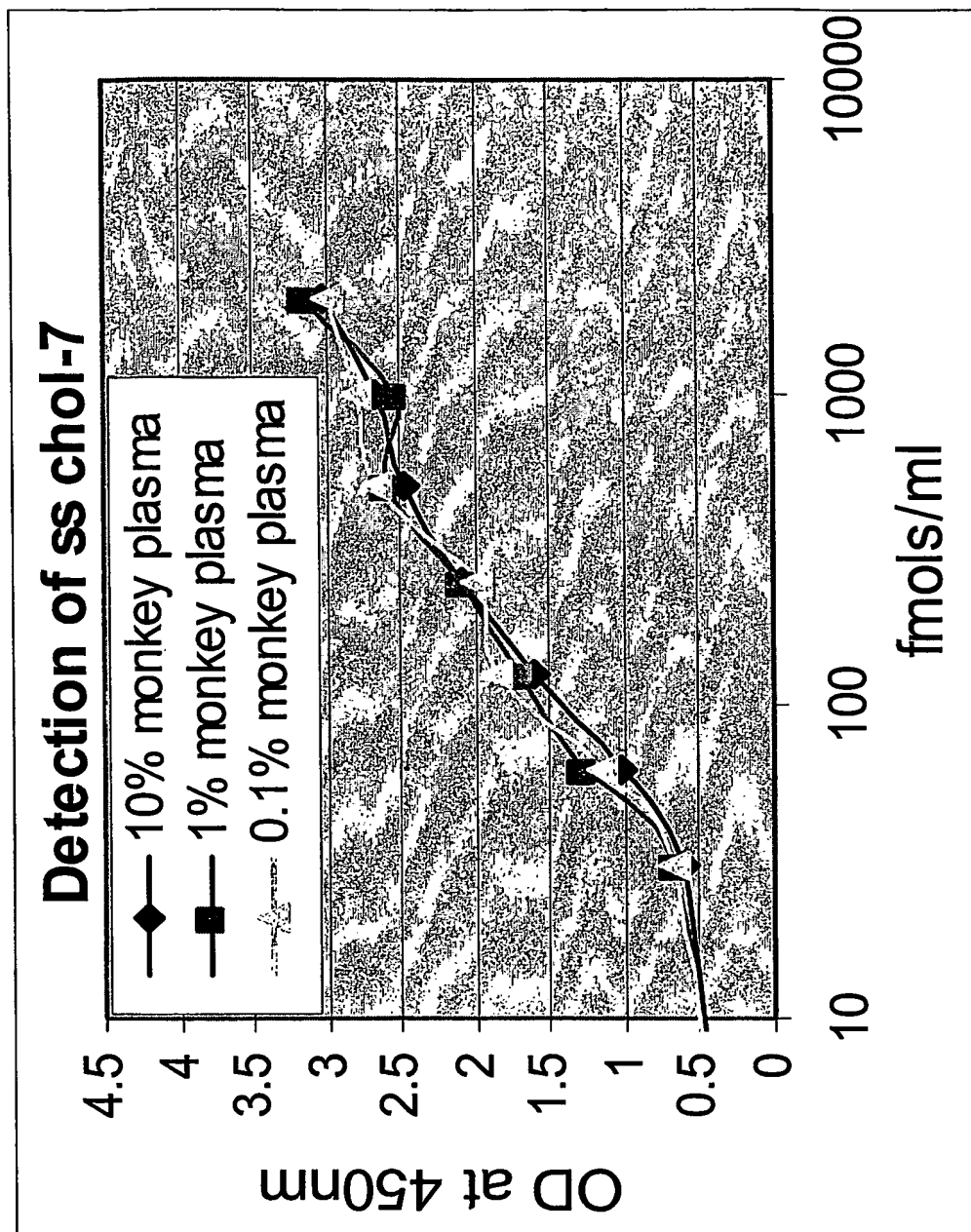


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**Figure 5C: Effect of Hepatocyte lysate on detection of Stab 7 cholesterol conjugate duplex siNA sequence**

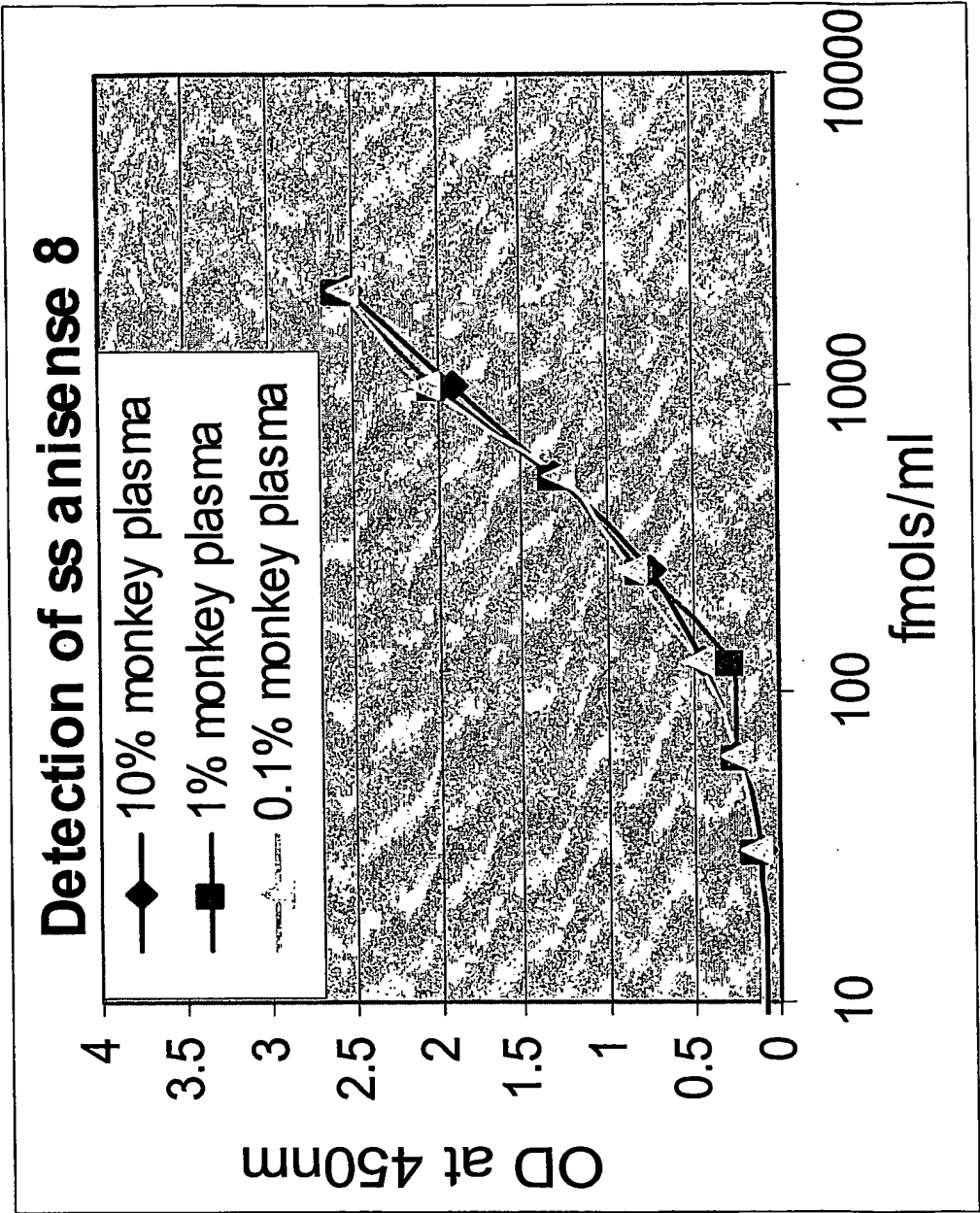


**Figure 6A: Effect of monkey plasma on detection of single stranded Stab 7 cholesterol conjugate siNA sequence**



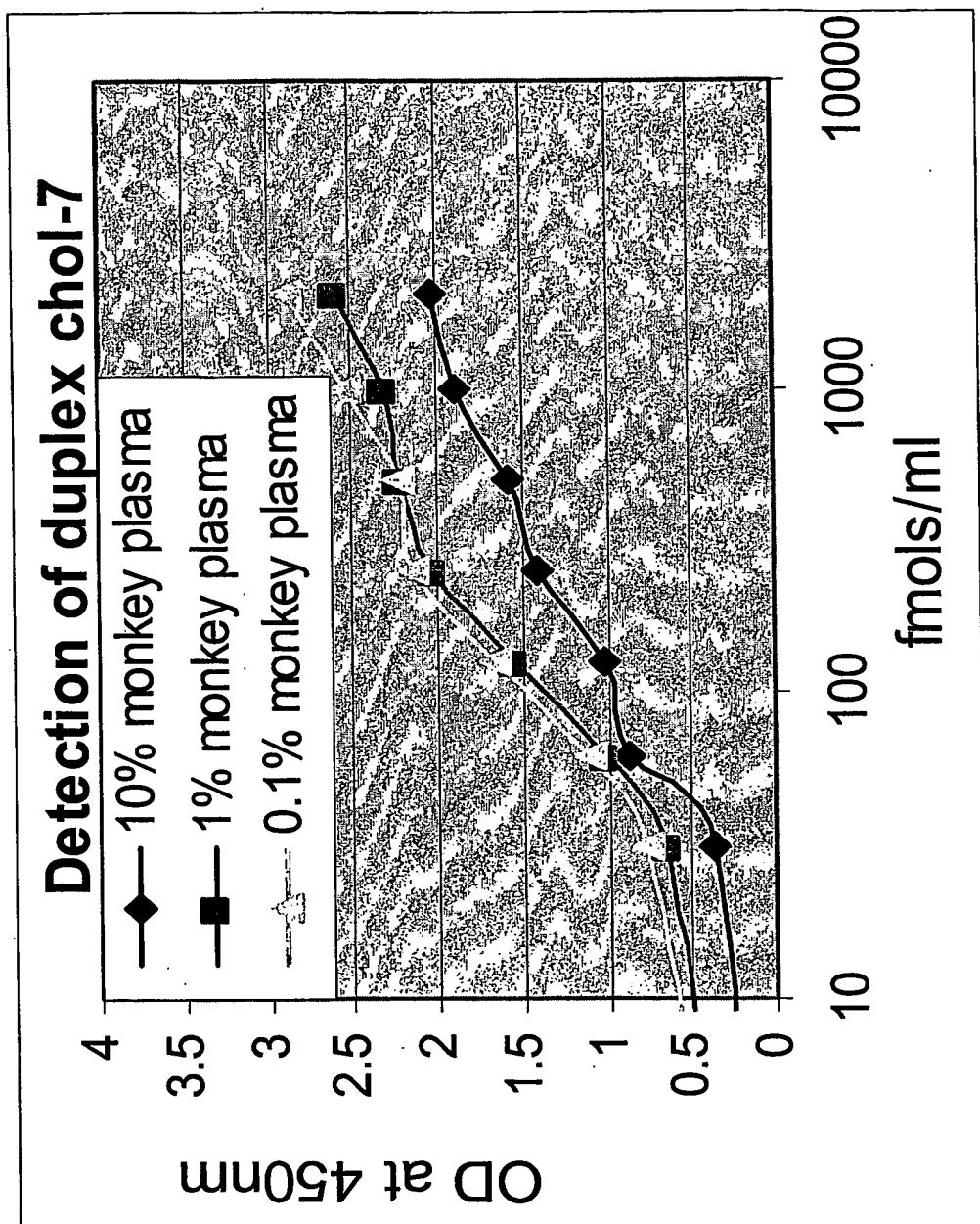


**Figure 6B: Effect of monkey plasma on detection of single stranded Stab 8 siNA sequence**



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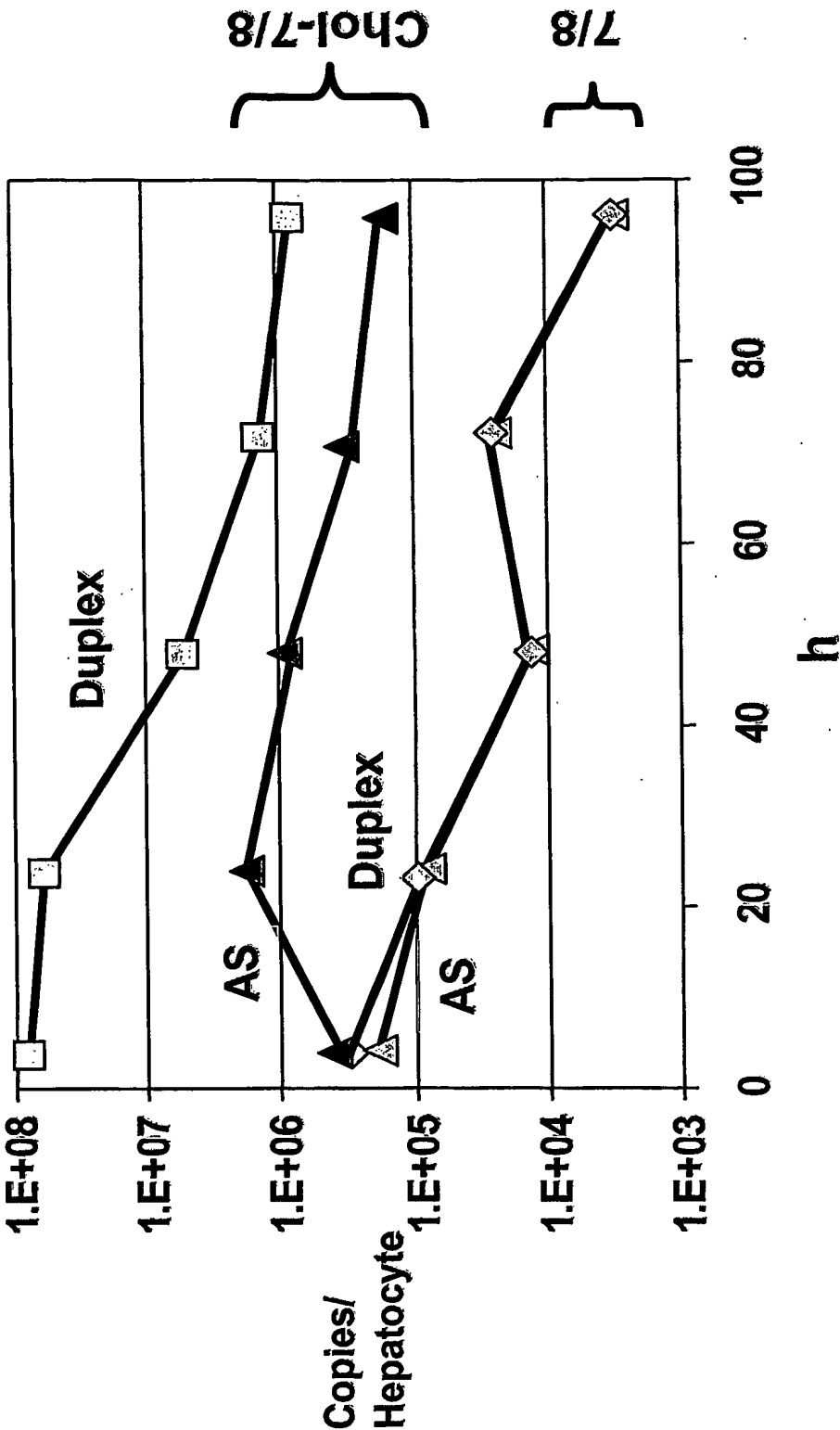
**Figure 6C: Effect of monkey plasma on detection of Stab 7 cholesterol conjugate duplex siNA sequence**



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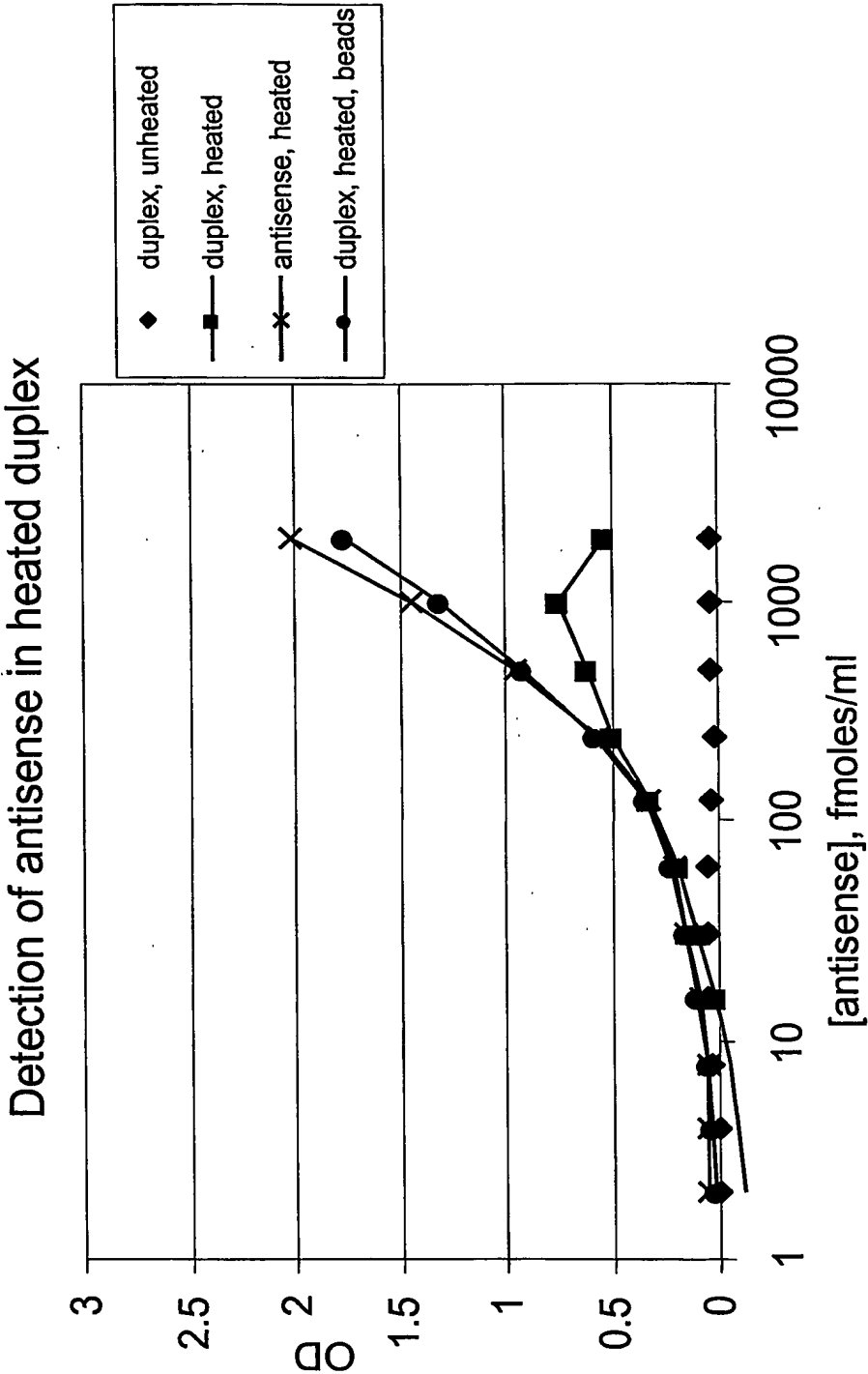
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**Figure 7: Concentration of siNA duplex and antisense  
In Hepatocytes**

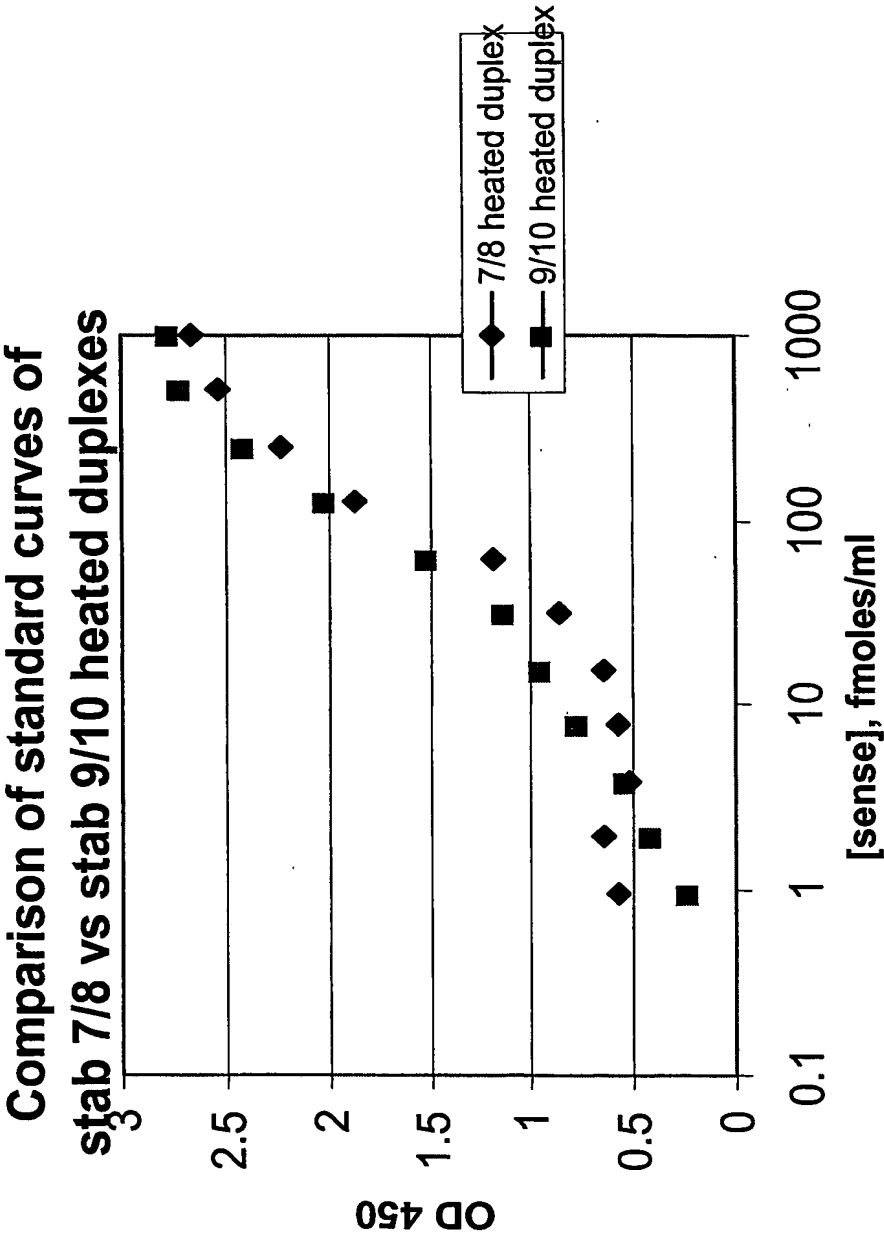


Given - 1 gram liver = 1 mL =  $10^{10}$  cells [siRNA ~  $\mu$ M]

**Figure 8: Removal of Competitive binding sequence**  
***In duplex assay***

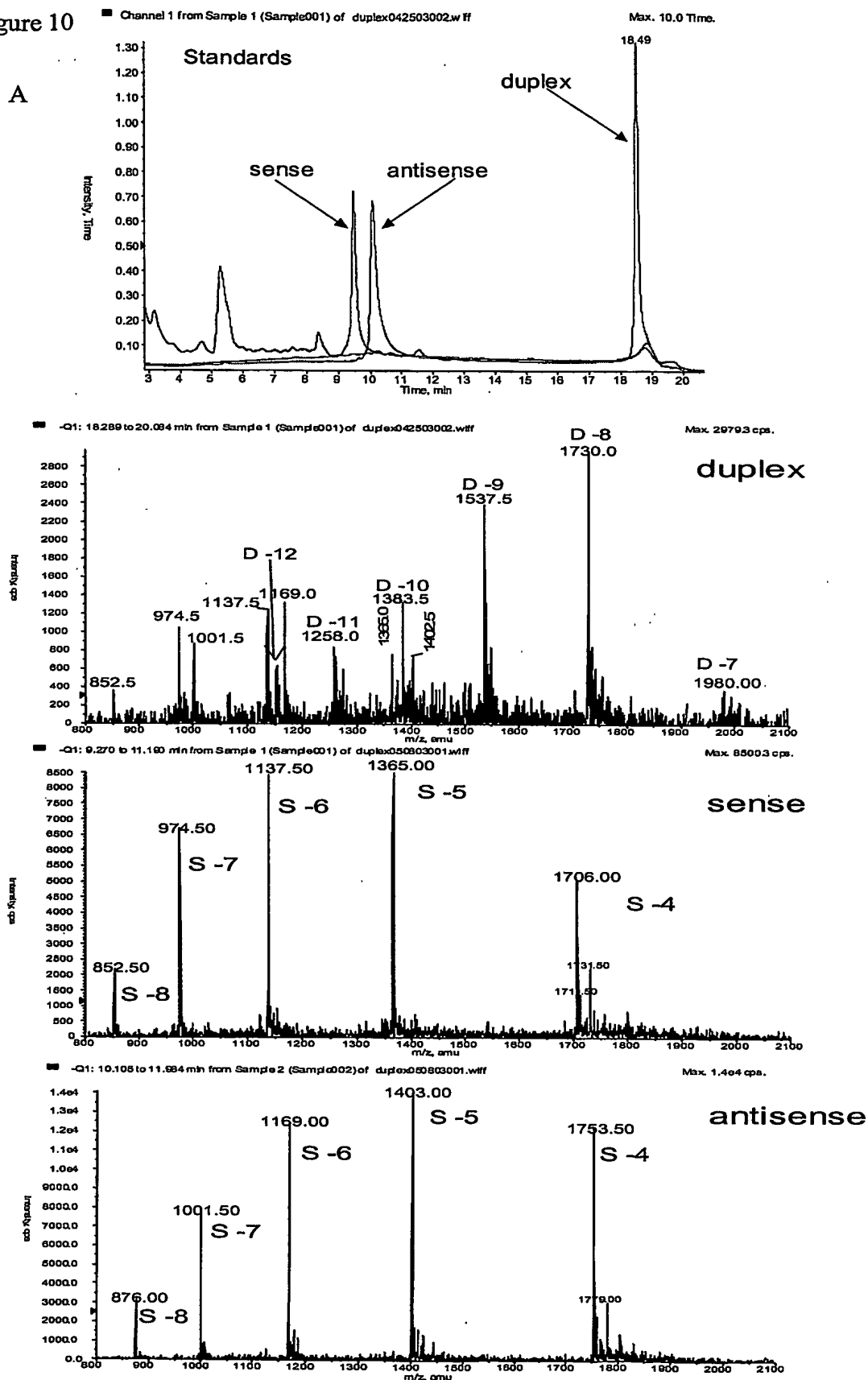


**Figure 9: Application of Hybridization Assay to siNA molecules having identical sequence with differing chemical modifications**



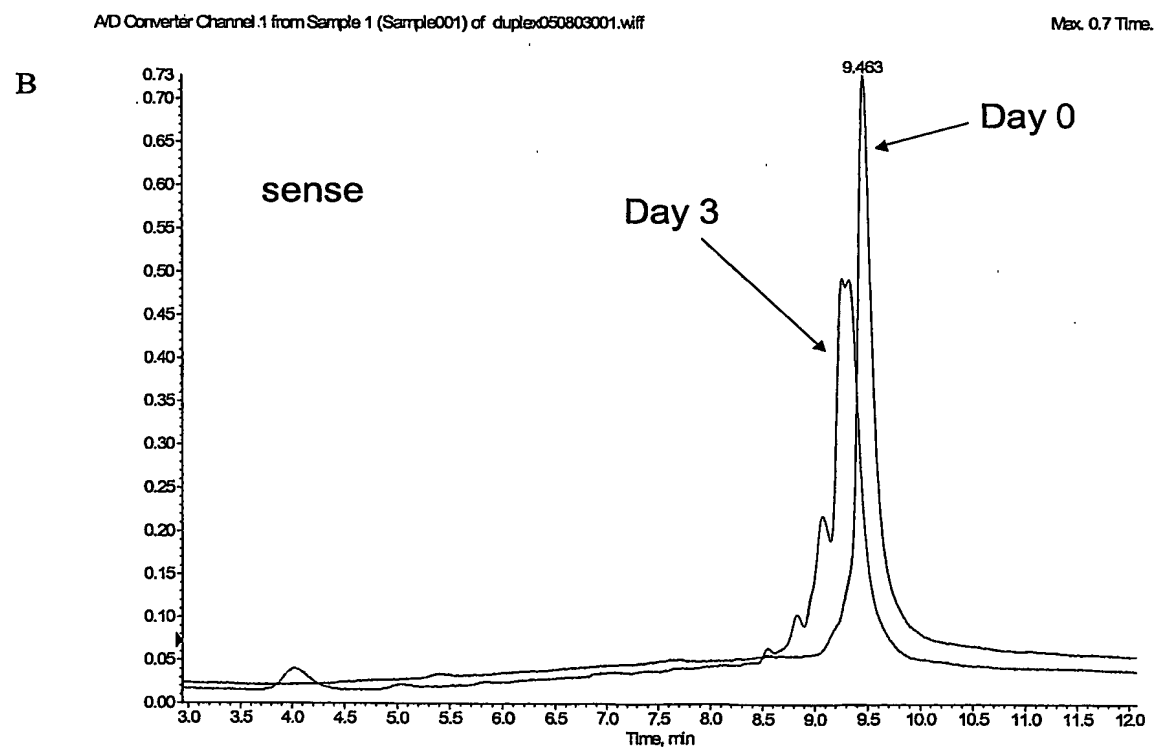
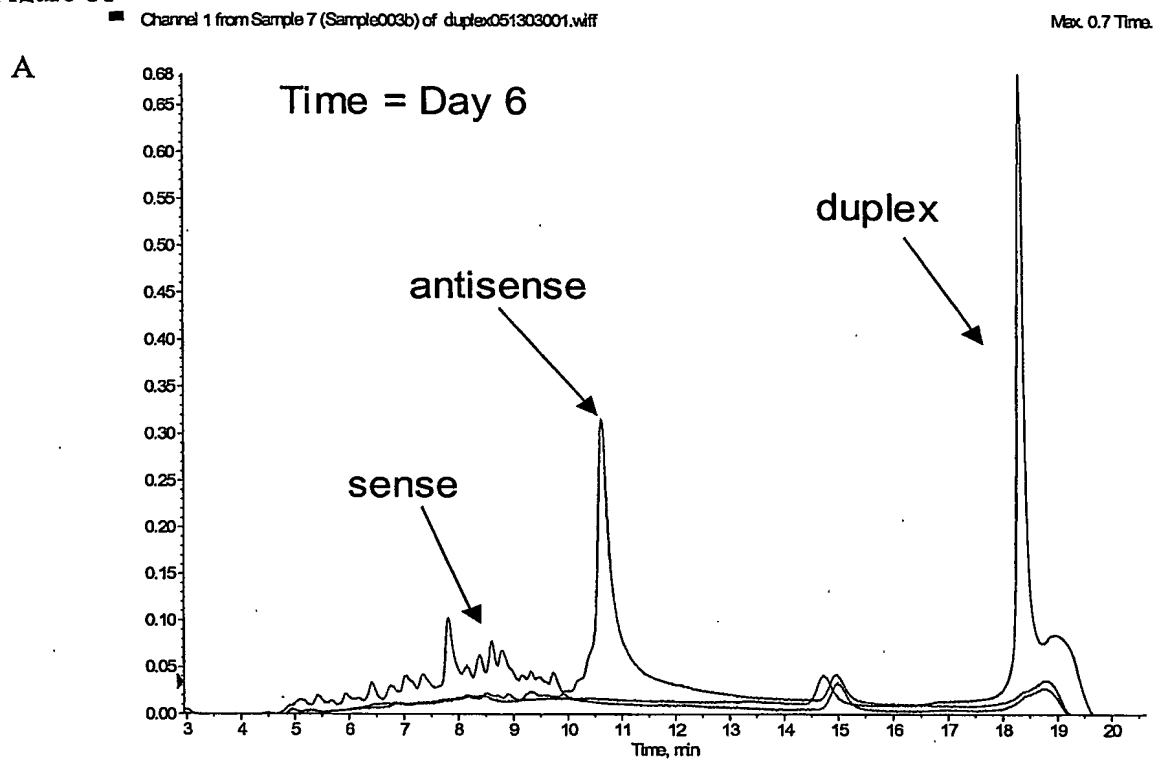
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Figure 10



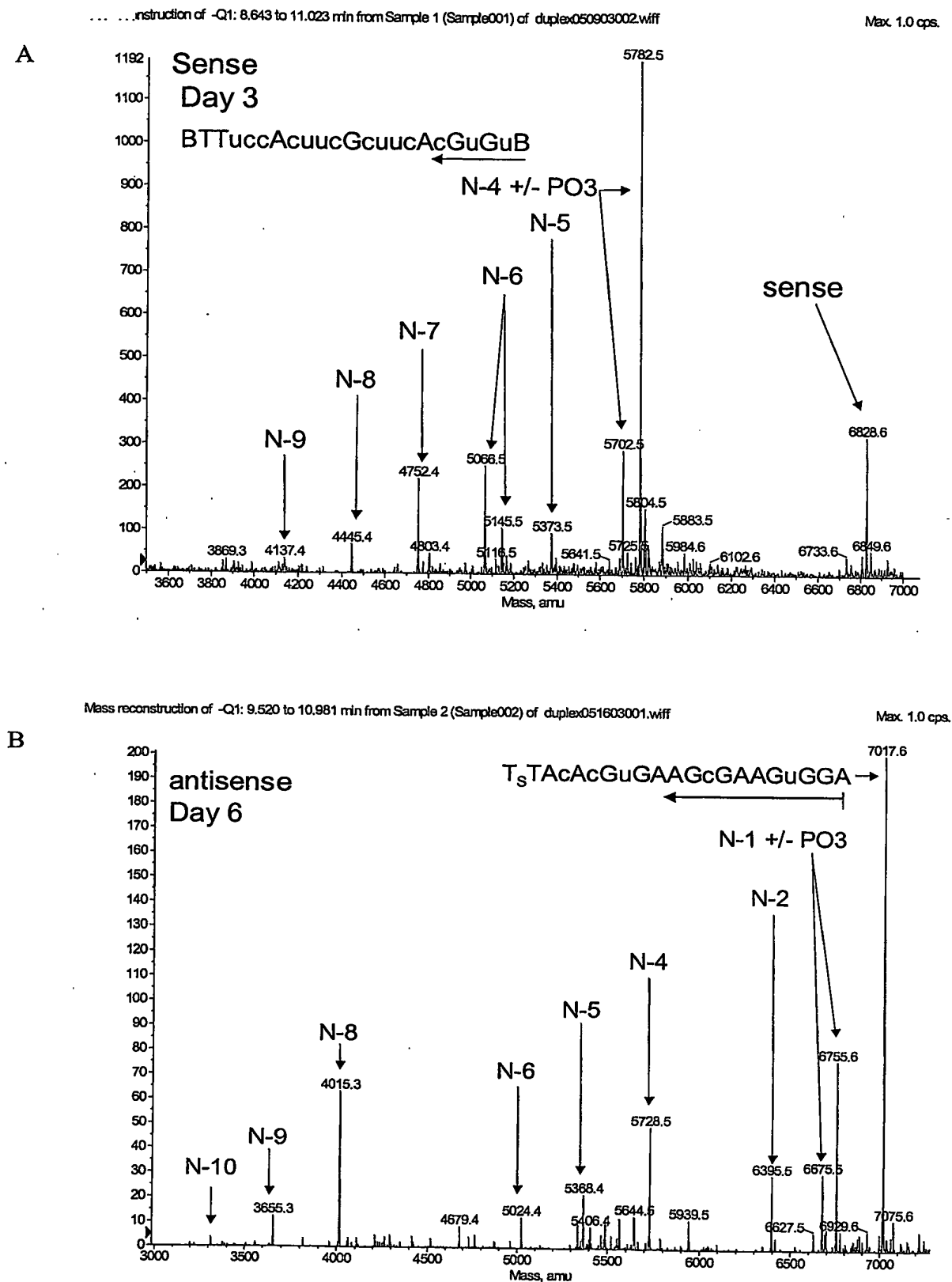
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Figure 11



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Figure 12





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Figure 13

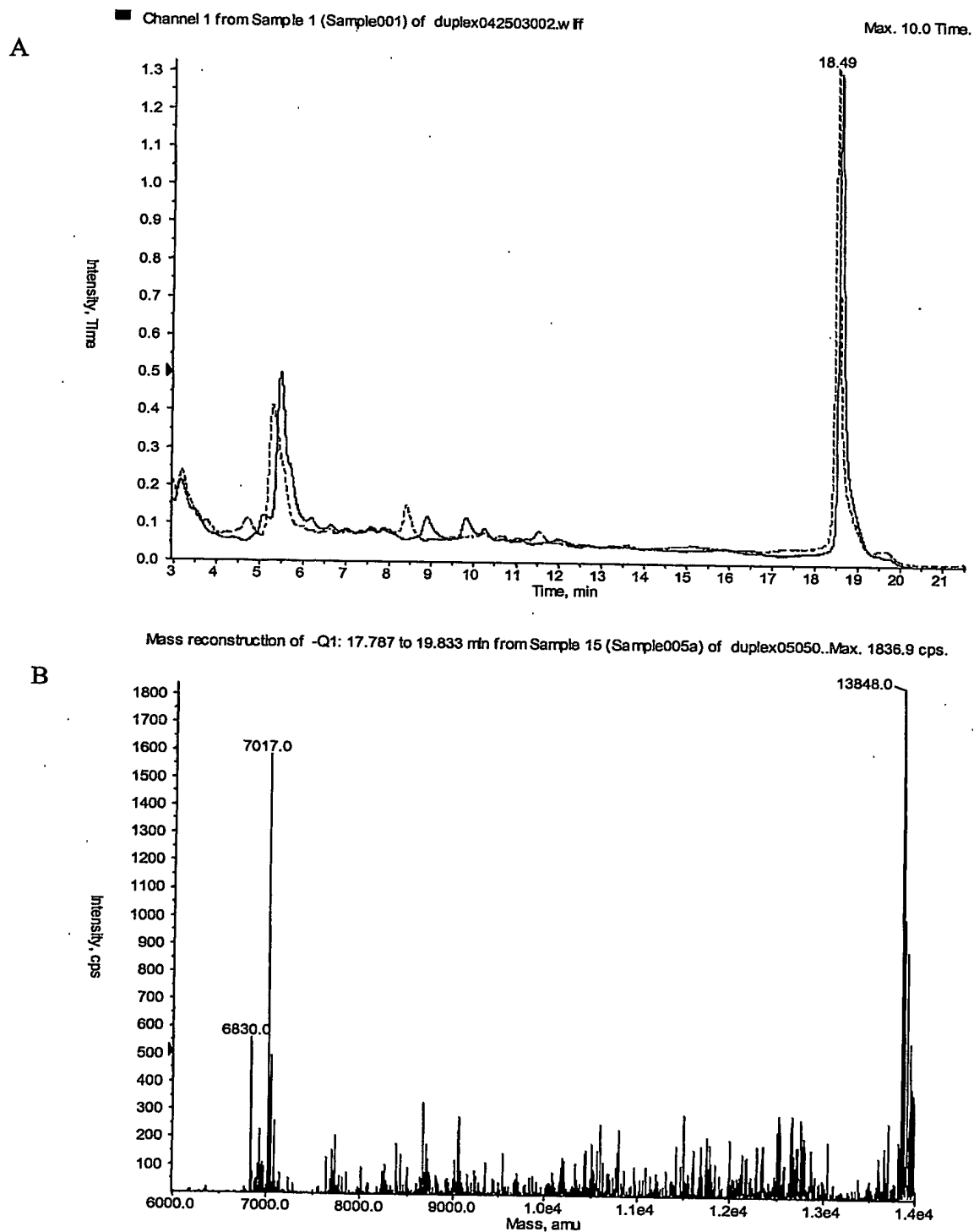
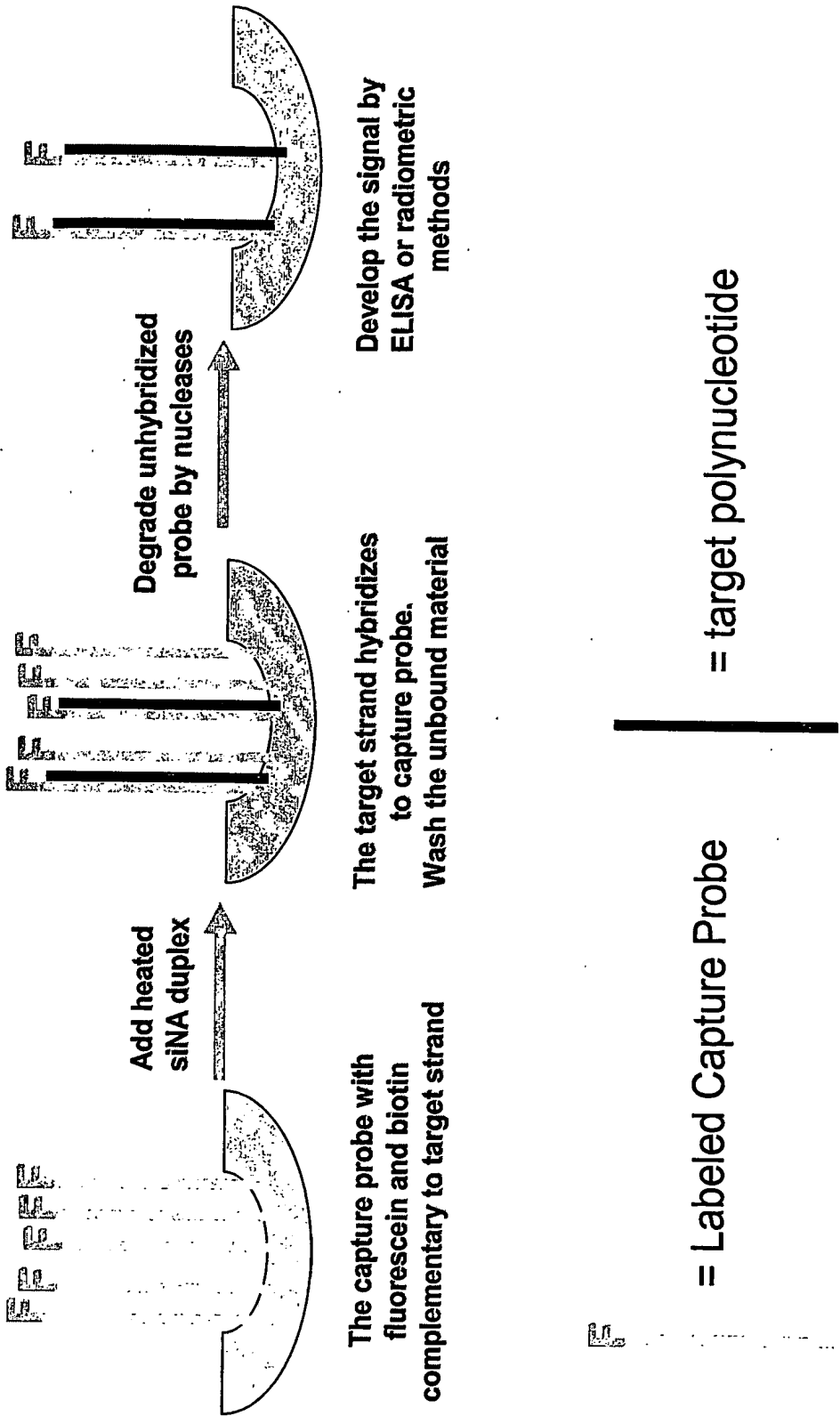
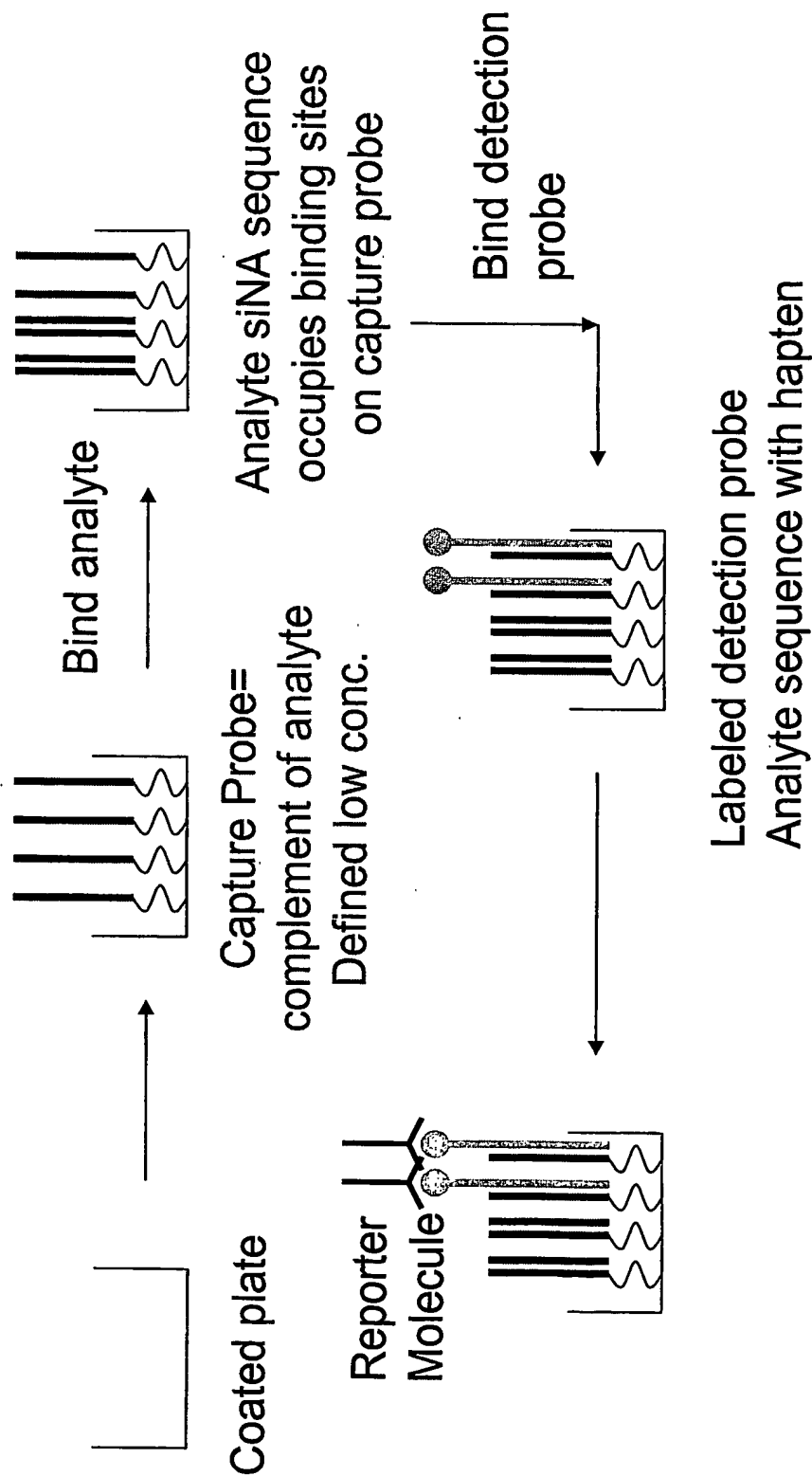


Figure 14



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**Figure 15**

In this design, binding of the target siRNA (in step 1) prevents binding of a secondary detection probe (in step 2). Therefore, signal is inversely proportional to analyte concentration.